AN EVALUATION OF COMPREHENSIVE DISTANCING FOR MORAL DISGUST, SHAME, & GUILT IN POSTTRAUMATIC STRESS REACTIONS

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Disclosures

- Dean McKay receives royalties from:
Background & rationale

- Why study moral disgust, shame, & guilt in posttraumatic stress symptoms (PTSS)?
- Why study comprehensive distancing (CD) as an intervention for these emotions in PTSS?
Disgust in PTSS

- PTSD traditionally described as a disorder of fear \(^1\)
  - Reflected in current standard of care \(^2\)-\(^5\)

- However, evidence for other emotions in PTSS (e.g., disgust, shame, guilt) \(^6\)-\(^11\)

- **Disgust**: basic emotion that evokes repulsion and avoidance \(^12\)
  - Evolutionary significance
  - Multiple dimensions
Moral disgust in PTSS

- **Moral disgust**: disgust experienced towards people that violate boundaries of justice, social acceptability, or fairness \(^{13,14}\)

- Relations to trauma (especially interpersonal)

- Initial evidence for role of moral disgust in PTSS
  - Moral disgust predicts posttraumatic avoidance as mediated by negative affect \(^{15}\)
Shame & guilt in PTSS

- **Shame**: negatively valenced, self-referential, moral emotion, pertains to one’s *global* self-concept
  - Self-directed subtype of disgust? \(^{12,28}\)
  - Clearly associated with PTSS \(^{11,29,30}\)

- **Guilt**: restricted to *specific action or event*
  - Associated with PTSS \(^{6,7,31,32}\)
  - Compared to shame, literature is more equivocal
Treating moral, disgust-based emotions

- Existing treatments may not be maximally effective for moral, disgust-related emotional reactivity in PTSS 16
- Disgust has limited response to exposure 17-21 and cognitive modification compared to fear 22,23
Comprehensive distancing (CD)

- Component of Acceptance and Commitment Therapy (ACT)
  - Neutral observer to mental events – notice but do not react
- Apt for reducing moral disgust, shame, & guilt in trauma?
  - Shifts internal evaluation of mental events from negative to neutral
  - Case studies \(^\text{16,24}\) and RCT underway \(^\text{25}\)
Aim & hypothesis

- **Aim:**
  - Examine CD as intervention for moral disgust, shame, & guilt in PTSS

- **Hypothesis:**
  - CD will reduce moral disgust, shame, & guilt following trauma script more than a cognitive challenge comparison exercise
Method

- Phase I (screening)
- Phase II
Overview of study procedures

**Phase I**
- MDS
- TDDS
- PANAS
- TOSCA-3
- LEC
- PCL-C
- IES-R
- PTCI
- TRGI

PCL-C score ≥ 40 and Criterion A endorsed?

- **No**
  - Debriefed via email

- **Yes**

**Phase II**
1. Randomized *(CD or CC)*
2. Generate imagery script
3. VAS
4. Introductory session
5. Practice session
6. Manipulation check A
7. Experimental session
8. VAS
9. Manipulation check B
10. Treatment history
11. Optional PMR
12. Debriefing/compensation
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Screening (Phase I)

- Screening sample: $N = 445$ undergraduates
  - Fordham University ($n = 248$)
  - University of Arkansas ($n = 197$)
  - $M_{\text{age}} = 20.08$ ($SD = 4.21$)
  - 74% female

- Self-report measures on disgust, moral disgust, shame, guilt, and traumatic events & symptoms

- “Callbacks” for Phase II
  - Score $\geq 40$ on PCL-C (upper quartile)
  - Endorse DSM-IV Criterion A
Phase II participants

- $N = 45$
- $M_{age} = 21.07 \ (SD = 4.40)$
- 78% female

**Treatment history**
- 64.4% lifetime therapy
- 26.7% lifetime meds
- 20% in therapy and 15% on meds at time of study

<table>
<thead>
<tr>
<th>Racial self-identification</th>
<th>% of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>White (non-Hispanic)</td>
<td>58%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>24%</td>
</tr>
<tr>
<td>Black</td>
<td>9%</td>
</tr>
<tr>
<td>Asian</td>
<td>4%</td>
</tr>
<tr>
<td>“Other race”</td>
<td>11%</td>
</tr>
<tr>
<td>“More than one race”</td>
<td>2%</td>
</tr>
</tbody>
</table>
Phase II participant traumas

- Sexual trauma: 45%
- Violent trauma: 31%
- Sudden loss: 11%
- Environmental danger: 9%
- Accident: 4%
Overview of study procedures

**Phase I**

- MDS
- TDDS
- PANAS
- TOSCA-3
- LEC
- PCL-C
- IES-R
- PTCI
- TRGI

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**Phase II**

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Comprehensive distancing (CD)

Now I’d like you to close your eyes, and imagine you are standing by a stream with leaves floating by. Imagine placing each new thought that arises about the trauma onto the leaves that are floating by down the stream in front of you. You see your thoughts etched on a leaf. You are simply an observer. Just as the leaves floating down the stream come and go, so do your thoughts. Remember these are just thoughts. They do not dictate your emotions.

- Are you aware of the thoughts you’re having right now?
- Are you able to see them simply as thoughts?
- Can you see those thoughts floating past you in the stream? Do you see how they come and go?
- Can you see yourself as that neutral observer, watching yourself having these thoughts?
Challenging cognitions (CC)

Now identify what your automatic thoughts are about this situation. Consider the facts of reality surrounding this situation. Do the facts support your thoughts?

- Can you identify the automatic thoughts you are having right now?
- What is the evidence for that thought being true?
- What are some alternative possibilities to this automatic thought?
Outcome measure

- Visual analog scale (VAS) ratings:
  - Disgust
  - Moral disgust
  - Shame
  - Guilt

- Administered pre- (after writing trauma script) and post-exercise

1. How much **DISGUST** do you feel right now?
Results

- Will CD reduce moral disgust, shame, & guilt more than CC following trauma scripts?
## Repeated measures GLM: Time effect

<table>
<thead>
<tr>
<th></th>
<th>Pre exercise VAS EMM (SE)</th>
<th>Post exercise VAS EMM (SE)</th>
<th>Mean Square*</th>
<th>F</th>
<th>Partial η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disgust</td>
<td>0.56 (0.05)</td>
<td>0.34 (0.05)</td>
<td>1.05</td>
<td>25.89**</td>
<td>.38</td>
</tr>
<tr>
<td>Moral Disgust</td>
<td>0.54 (0.05)</td>
<td>0.30 (0.04)</td>
<td>1.23</td>
<td>37.58**</td>
<td>.47</td>
</tr>
<tr>
<td>Anxiety</td>
<td>0.61 (0.04)</td>
<td>0.35 (0.04)</td>
<td>1.58</td>
<td>44.96**</td>
<td>.51</td>
</tr>
<tr>
<td>Guilt</td>
<td>0.43 (0.05)</td>
<td>0.27 (0.04)</td>
<td>0.57</td>
<td>12.30*</td>
<td>.22</td>
</tr>
<tr>
<td>Shame</td>
<td>0.53 (0.05)</td>
<td>0.25 (0.04)</td>
<td>1.70</td>
<td>41.14**</td>
<td>.49</td>
</tr>
<tr>
<td>Anger</td>
<td>0.54 (0.04)</td>
<td>0.25 (0.04)</td>
<td>1.84</td>
<td>31.49**</td>
<td>.54</td>
</tr>
<tr>
<td>Sadness</td>
<td>0.64 (0.03)</td>
<td>0.35 (0.04)</td>
<td>1.85</td>
<td>50.46**</td>
<td>.54</td>
</tr>
<tr>
<td>Happiness</td>
<td>0.21 (0.03)</td>
<td>0.32 (0.03)</td>
<td>0.28</td>
<td>9.70*</td>
<td>.18</td>
</tr>
</tbody>
</table>

* = p < .01; ** = p < .001; + = for all comparisons, df = 1
Pre- & post-intervention VAS ratings

Moral Disgust

VAS ratings (estimated marginal means)

Pre       Post

Intervention timepoint

CD
CC
Pre- & post-intervention VAS ratings

Shame

Intervention timepoint

Pre  Post

CD

CC
Pre- & post-intervention VAS ratings

Guilt

VAS ratings (estimated marginal means)

Intervention timepoint

Pre
Post

CD
CC
Implications & future directions
Implications

- Moral disgust, shame, & guilt activated *and* reduced by both CD and comparison
- CD and ACT-based strategies may be viable alternatives to traditional CBT for trauma
  - Tx response
  - Tx acceptability $^26$
  - Longer term advantages? $^27$
- *Bottom line*: follow up studies necessary to clarify impact of results
Strengths & limitations

- **Strengths**
  - Generalizability
  - Experimental design

- **Limitations**
  - Non-clinical sample
  - Range of trauma types
  - Brief interventions & no follow-up
Thank you!

- **Fordham team**
  - Dean McKay, Ph.D.
  - Justin Arocho, M.A.
  - Mike Drosos (RA)
  - Alex Mager (RA)

- **UArk team**
  - Matthew Feldner, Ph.D.
  - Christal Badour, M.A.
  - Courtney Dutton, M.S.
  - Erin Brannan (RA)
References


References


Questions? Comments?